

R126 2 + An antibody or binding fragment thereof which specifically binds MCP-1 receptor polypeptide, wherein the polypeptide is selected from the group consisting of:

- (a) a polypeptide comprising the amino acid sequence of SEQ ID NO: 2;
- (b) a polypeptide comprising the amino acid sequence of SEQ ID NO: 4;

and

(c) a polypeptide encoded by an isolated nucleic acid selected from the group consisting of:

- (i) DNA comprising residues 40 through 1161 of the DNA sequence of SEQ ID NO:1
- (ii) DNA comprising residues 81 through 1160 of the DNA sequence of SEQ ID NO:3; and
- (iii) DNA that, due to the degeneracy of the genetic code, encodes a polypeptide, encoded by any of the foregoing DNA sequences.

a² 3 - An antibody or antigen binding fragment thereof that specifically binds to a polypeptide comprising the amino acid sequence of an MCP-1R polypeptide which is

(a) a polypeptide having a sequence at least 90% identical to the sequence of MCP-1RA as shown in SEQ ID NO:2,

(b) a polypeptide having a sequence at least 90% identical to the sequence of MCP-1RB as shown in SEQ ID NO:4, or

(c) a fragment of a polypeptide according to (a) or (b) which binds specifically to MCP-1, wherein the sequence of the fragment is at least 90% identical to the corresponding portion of SEQ ID NO:2 or SEQ ID NO:4;

wherein the MCP-1R polypeptide binds specifically to MCP-1 but not to MIP-1 α , MIP-1 β , RANTES, or IL-8 under physiological conditions.

4 ~~3~~³ The antibody of claim ~~2~~³, wherein the polypeptides (a) and (b) and the fragment (c) are at least 95% identical to SEQ ID NO:2, SEQ ID NO:4, and the corresponding portion of SEQ ID NO:2 or SEQ ID NO:4, respectively.

5 ~~4~~³ The antibody of claim ~~2~~³, wherein the polypeptide comprises the amino acid sequence of an MCP-1R polypeptide having a sequence at least 90% identical to the sequence shown in SEQ ID NO:2 or SEQ ID NO:4.

6 ~~5~~⁴ The antibody of claim ~~3~~⁴, wherein the polypeptide comprises the amino acid sequence of an MCP-1R polypeptide having a sequence at least 95% identical to the sequence shown in SEQ ID NO:2 or SEQ ID NO:4.

7 ~~6~~³ The antibody of claim ~~2~~³, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2 (FIG. 1) or SEQ ID NO:4 (FIG. 2).

8 ~~7~~³ The antibody of claim ~~2~~³, wherein the polypeptide comprises a fragment of SEQ ID No:2 or SEQ ID No:4, wherein said fragment has the amino acid sequence of an extracellular domain of MCP-1RA, substantially as shown in FIGS. 4A and 4B.

9 ~~8~~³ The antibody of claim ~~2~~³, wherein the antibody is labeled with a detectable label.

10 ~~9~~⁶ The antibody of claim ~~5~~⁶, wherein the detectable label is a radioactive isotope.

11 ~~10~~³ The antibody of claim ~~2~~³, wherein the antibody is a monoclonal antibody.

12 ~~11~~³ The antibody of claim ~~2~~³, wherein antibody is a humanized antibody.

13 ~~12~~⁸ A cell line producing the monoclonal antibody of claim ~~7~~⁸.

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